Information Sheet

Melton Valley ROD Explanation of Significant Differences-Addition of Units to the Selected Remedy

Proposed Change to the Melton Valley Record of Decision (ROD)

The Department of Energy (DOE) is seeking to add eleven units to the scope detailed in the document *Record of Decision (ROD) for Interim Actions for the Melton Valley Watershed at the Oak Ridge National Laboratory, Oak Ridge , Tennessee (DOE/OR/01-1862&D3)*, which was signed on September 2000. Although the proposed remedial actions are considered to be consistent with the ROD remedy, the addition of these units is considered a significant change in the original remedy outlined in the ROD, so it will be documented in a supplemental document known as an Explanation of Significant Differences (ESD).

The eleven additional units were not included in the original scope of the ROD because they were considered active at the time the ROD was signed. However, they have since transitioned or are being transitioned to inactive status, and thereby become eligible for remediation. Three of the units [Straw Shed (7831-C), SWSA 6 Staging Facility (7878), and SWSA 6 Waste Storage Facility (Building 7842)] require demolition to facilitate Solid Waste Storage Area (SWSA) 5 and 6 cap installation. Remediation of the eleven units can be effectively performed by grouping them with similar or compatible facilities or waste units already scheduled for remediation under the ROD.

This action is in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), which governs remediation of sites on the National Priorities List, commonly referred to as Superfund. Sites on the DOE Oak Ridge Reservation are included on that list.

Background

The Melton Valley portion of the White Oak Creek watershed occupies approximately 1,000 acres in the southern portion of the Oak Ridge National Laboratory (ORNL). Portions of the watershed have been contaminated with a variety of wastes, including liquid and solid low-level radioactive wastes, through past disposal practices.

The Melton Valley ROD addresses current contaminant releases and potential risk or hazard through a combination of remedial activities such as containment, stabilization, removal, treatment, monitoring, and land use controls. The selected remedial activities are expected to significantly reduce the release of contaminants from Melton Valley source areas into White Oak Creek, Melton Branch, their tributaries, and the Clinch River. The selected remedy leaves hazardous substances in place, which pose a future potential risk and would require land use restrictions for hundreds of years or longer.

Descriptions of Units and Proposed Actions

Table 1 (on the back page) presents descriptions of the eleven units and their proposed remedial action changes. DOE is in the process of preparing the necessary information to support a modification to the Melton Valley ROD to include the unit additions and remedial action changes. The overall impact of this post-ROD change to the remedy is an incremental increase in scope and cost. The ESD will be submitted to the regulators for their review and approval. It will also be made available to the public.

For More Information

DOE welcomes public participation. Requests for additional information may be referred to the DOE Public Affairs Office, U.S. Department of Energy, P.O. Box 2001, Oak Ridge, Tennessee 37831, phone: (865) 576-0885; toll-free: 1-800-382-6938, option 1.

Table 1. Descriptions of the Units

Unit	Unit Description	Proposed Remedial Action
Active LLLW Slotting Tank T-13	NHF tank containing sludge generated during well slotting and recovery operations	Remove liquids to the extent practicable and grout sludge heel, tank shell, and vault in place
Straw Shed (7831-C)	Metal pavilion located in SWSA 5 South used for temporary waste storage.	Demolish
SWSA 6 Staging Facility	Butler-type building used for CH-TRU waste storage	Demolish
SWSA 6 Waste Storage Facility (Building 7842)	Butler-type building used for CH-TRU waste storage	Demolish
Epicore II Storage Building (7848)	Small metal shed used in support of NRC-sponsored radionuclide leachability studies	Demolish
Epicore II Contaminated Soil and Lysimeters	Five buried stainless steel lysimeters used in support of NRC-sponsored radionuclide leachability studies	Excavate and dispose of lysimeters and contaminated soils
Equipment Storage Area (7841)	Storage area, located between SWSA 4 and Pit 2, for potentially reusable contaminated equipment from historical operations	Remove and dispose of non-recyclable equipment and debris; excavate and dispose of contaminated soil above remediation levels
Tanks T-1/T-2 Central Pumping Station (7567)	Pumping station servicing Tanks T-1, T-2, HFIR, and WC-20	Demolish surface facilities to slab; grout subsurface structures in place
Well Drilling Steam Cleaning Area Outside of WAG 5	Area used to decontaminate well drilling equipment and for interim storage of equipment that contains, or may contain, radioactive contamination	Remove and dispose of non-recyclable equipment and debris; excavate and dispose of contaminated soil above remediation levels
Engineered Test Facility	R&D area consisting of nine trenches in SWSA 6 used to investigate improved land burial technologies for LLW disposal in humid environments	Excavate and dispose of waste and contaminated soil above remediation level
ER Storage Bunker (7844)	A three-vault facility located in SWSA 6 used to store contaminated concrete block from D&D of the Waste Evaporator Facility (3506)	Demolish

CH-TRU = contact-handled transuranic
D&D = decontamination and decommissioning
LLW = low-level waste
LLLW = low-level liquid waste
NHF = New Hydrofracture Facility
NRC = Nuclear Regulatory Commission
R&D = research and development
SWSA = Solid Waste Storage Area